**Amendments to the Claims:**

This listing of claims will replace all prior versions and listing of claims in the application.

**Listing of Claims:**

1-23. (Canceled)

24. (New) A moisture transfer apparel to be worn by individuals engaged in activities that generate moisture comprising, on at least a portion of the apparel, a combination of layers comprising:

a first layer, closest to the individual, the first layer being an inner moisture transfer material;

a second layer, abutting the first layer, including a breathable, open cell foam material;

a third layer, abutting the second layer, including a knit material; and

a fourth layer, abutting the third layer, the fourth layer being an outer moisture transfer material that is encapsulated for waterproofing,

wherein the combination of layers is breathable and enables moisture vapor to be transferred through the apparel from the first layer through the fourth layer so as to keep the individuals dry,

wherein at least one of the first through fourth layers has reversible enhanced thermal properties.

25. (New) The moisture transfer apparel according to claim 24, wherein at least two of the first, second, third and fourth layers are attached to each other by lamination.

26. (New) The moisture transfer apparel according to claim 24, wherein at least two of the first, second, third and fourth layers are attached to each other by mechanical bonding.

27. (New) The moisture transfer apparel according to claim 24, wherein the fourth layer is laminated to the knit of the third layer.

28. (New) A moisture transfer apparel to be worn by individuals engaged in activities that generate moisture comprising, on at least a portion of the apparel, a combination of layers comprising:

a first layer, closest to the individual, the first layer being an inner moisture transfer material;

a second layer, abutting the first layer, including a breathable, open cell foam material;

a third layer, abutting the second layer, including a knit material; and

a fourth layer, abutting the third layer, the fourth layer being an outer moisture transfer material that is selected from fabrics that are structurally knitted or woven to repel water,

wherein the combination of layers is breathable and enables moisture vapor to be transferred through the apparel from the first layer through the fourth layer so as to keep the individuals dry,

wherein at least one of the first through fourth layers has reversible enhanced thermal properties.

29. (New) The moisture transfer apparel according to claim 24, wherein the second layer and third layer are formed as an elastomeric composite having the knit material combined with the breathable, open cell foam material in a single process.

30. (New) A moisture transfer apparel to be worn by individuals engaged in activities that generate moisture comprising, on at least a portion of the apparel, a combination of layers comprising:

a first layer, closest to the individual, the first layer being an inner moisture transfer material;

a second layer, abutting the first layer, including a breathable, open cell foam material;

a third layer, abutting the second layer, including a knit material; and

a fourth layer, abutting the third layer, the fourth layer being an outer moisture transfer material that is encapsulated for waterproofing,

wherein the combination of layers is breathable and enables moisture vapor to be transferred through the apparel from the first layer through the fourth layer so as to keep the individuals dry,

wherein the second layer is treated with microencapsulation technology which can adjust to temperature changes.

31. (New) A moisture transfer apparel to be worn by individuals engaged in activities that generate moisture comprising, on at least a portion of the apparel, a combination of layers comprising:

a first layer, closest to the individual, the first layer being an inner moisture transfer material;

a second layer, abutting the first layer, including a breathable, open cell foam material;

a third layer, abutting the second layer, including a knit material; and

a fourth layer, abutting the third layer, the fourth layer being an outer moisture transfer material that is selected from fabrics that are structurally knitted or woven to repel water,

wherein the combination of layers is breathable and enables moisture vapor to be transferred through the apparel from the first layer through the fourth layer so as to keep the individuals dry,

wherein the second layer is treated with microencapsulation technology which can adjust to temperature changes.

32. (New) The moisture transfer apparel according to claim 24, wherein the second layer has reversible enhanced thermal properties.

33. (New) The moisture transfer apparel according to claim 28, wherein the second layer has reversible enhanced thermal properties.

34. (New) The moisture transfer apparel according to claim 24, wherein the outer moisture transfer material is selected from a group consisting of cotton and a cotton blend.

35. (New) The moisture transfer apparel according to claim 24, wherein the outer moisture transfer material comprises synthetic fibers.

36. (New) The moisture transfer apparel according to claim 24, further comprising a membrane, abutting the breathable, open cell foam material, for providing either warmth or cooling.

37. (New) The moisture transfer apparel according to claim 28, further comprising a membrane, abutting the breathable, open cell foam material, for providing either warmth or cooling.

38. (New) The moisture transfer apparel according to claim 24, wherein a membrane is applied to the second layer so that it has reversible thermal enhanced properties.

39. (New) The moisture transfer apparel according to claim 28, wherein a membrane is applied to the second layer so that it has reversible thermal enhanced properties.

40. (New) A moisture transfer apparel according to claim 24, wherein the second layer includes a breathable membrane.

41. (New) A moisture transfer apparel according to claim 24, wherein the third layer includes a breathable membrane.

42. (New) A moisture transfer apparel according to claim 24, wherein the second layer includes a thermal insulating material.

43. (New) A moisture transfer apparel according to claim 24, wherein the third layer includes a thermal insulating material.

44. (New) A moisture transfer composite comprising a plurality of layers arranged to transfer moisture in a predetermined direction, the moisture transfer composite comprising:

an inner fabric layer;

an outer fabric layer positioned relative to the inner fabric layer in the direction of moisture flow, wherein moisture flows from the inner fabric layer through any intermediate layers and then through the outer fabric layer; and

at least one breathable, open cell foam material positioned between the inner fabric layer and the outer fabric layer, wherein the outer fabric layer is made to have waterproof/breathable characteristics and wherein the breathable, open cell foam material is an open-cell breathable, open cell foam that is positioned adjacent to a knit material and wherein microencapsulation technology which can adjust to temperature changes is applied to either the breathable, open cell foam material or knit material thereby giving either material reversible enhanced thermal properties..

45. (New) The moisture transfer composite according to claim 44, wherein a wetting agent is applied to the inner fabric layer in order to increase moisture transfer.

46. (New) The moisture transfer composite according to claim 44, wherein the outer fabric layer is made to have waterproof/breathable characteristics by attaching a waterproof/breathable membrane thereto.

47. (New) The moisture transfer composite according to claim 44, wherein the outer fabric layer is made to have waterproof/breathable characteristics by application of a waterproof film.

48. (New) The moisture transfer composite according to claim 44, wherein the breathable, open cell foam material has reversible enhanced thermal properties.

49. (New) A moisture transfer composite comprising a plurality of layers arranged to transfer moisture in a predetermined direction, the moisture transfer composite comprising:

an inner fabric layer;

an outer fabric layer positioned relative to the inner fabric layer in the direction of moisture flow, wherein moisture flows from the inner fabric layer through any intermediate layers and then through the outer fabric layer; and

at least one breathable, open cell foam material positioned between the inner fabric layer and the outer fabric layer, wherein the breathable, open cell foam material is an antimicrobial, germicidal, open-cell breathable, open cell foam that is positioned adjacent to a knit material, and wherein the outer fabric layer has waterproof/breathable characteristics ; and wherein microencapsulation technology which can adjust to temperature changes is applied to either the breathable, open cell foam material or knit material thereby giving either material reversible enhanced thermal properties..

50. (New) The moisture transfer composite according to claim 49, wherein a wetting agent is applied to the inner fabric layer in order to increase moisture transfer.

51. (New) The moisture transfer composite according to claim 49, wherein the outer fabric layer is made to have waterproof/breathable characteristics by attaching a waterproof/breathable membrane thereto.

52. (New) The moisture transfer composite according to claim 49, wherein the outer fabric layer is made to have waterproof/breathable characteristics by either the application of a waterproof film or by the application of a waterproof coating.

53. (New) A moisture transfer composite which transfers moisture through a plurality of layers comprising:

an inner moisture transfer layer;

a breathable, open cell foam material positioned adjacent to the inner moisture transfer layer; and

a knit material positioned adjacent to the breathable, open cell foam layer,

wherein moisture is transferred from the inner moisture transfer layer, through the breathable, open cell foam layer and subsequently through the knit material and wherein microencapsulation technology which can adjust to temperature changes is applied to either the breathable, open cell foam material or knit material thereby giving either material reversible enhanced thermal properties..

54. (New) The moisture transfer composite according to claim 53, wherein the breathable, open cell foam material has reversible enhanced thermal properties.

55. (New) The moisture transfer composite according to claim 53, wherein the breathable, open cell foam material is a breathable, open cell foam material.

56. (New) The moisture transfer composite according to claim 44, wherein the inner fabric layer includes at least polyester or a polyester blend.

57. (New) The moisture transfer composite according to claim 49, wherein the inner fabric layer includes at least polyester or a polyester blend.

58. (New) The moisture transfer composite according to claim 44, wherein said knit material includes at least one material selected from a group consisting of spandex, wood pulp, cotton, polypropylene, polyester and rayon.

59. (New) The moisture transfer composite according to claim 48, wherein said knit material includes at least one material selected from a group consisting of spandex, wood pulp, cotton, polypropylene, polyester and rayon.

60. (New) The moisture transfer composite according to claim 49, wherein said knit material includes at least one material selected from a group consisting of spandex, wood pulp, cotton, polypropylene, polyester and rayon.

61. (New) The moisture transfer composite according to claim 53, wherein said knit top material includes at least one material selected from a group consisting of spandex, wood pulp, cotton, polypropylene, polyester and rayon.

62. (New) The moisture transfer composite according to claim 54, wherein said knit material includes at least one material selected from a group consisting of spandex, wood pulp, cotton, polypropylene, polyester and rayon.

63. (New) The moisture transfer composite according to claim 53, wherein the inner moisture transfer layer includes at least polyester or a polyester blend.

64. (New) The moisture transfer composite according to claim 44, wherein the microencapsulation technology is applied by using a membrane.

65. (New) The moisture transfer composite according to claim 49, wherein microencapsulation technology is applied by using a membrane.

66. (New) The moisture transfer composite according to claim 53, wherein microencapsulation technology is applied by using a membrane.

67. (New) The moisture transfer composite according to claim 44, wherein the breathable, open cell foam material and knit material are formed in a single process as an elastomeric composite.

68. (New) The moisture transfer composite according to claim 49, wherein the breathable, open cell foam material and knit material are formed in a single process as an elastomeric composite.

69. (New) The moisture transfer composite according to claim 53, wherein the breathable, open cell foam material and knit material are formed in a single process as an elastomeric composite.

70. (New) The moisture transfer composite according to claim 44, wherein the application of microencapsulation technology includes application of microcapsules containing phase change materials (PCMs).

71. (New) The moisture transfer composite according to claim 49, wherein the application of microencapsulation technology includes application of microcapsules containing phase change materials (PCMs).

72. (New) The moisture transfer composite according to claim 53, wherein the application of microencapsulation technology includes application of microcapsules containing phase change materials (PCMs).

73. (New) The moisture transfer composite according to claim 70, wherein the microcapsules containing PCMs are applied to the breathable, open cell foam material or the knit material as a coating.

74. (New) The moisture transfer composite according to claim 71, wherein the microcapsules containing PCMs are applied to the breathable, open cell foam material or the knit material as a coating.

75. (New) The moisture transfer composite according to claim 72, wherein the microcapsules containing PCMs are applied to the breathable, open cell foam material or the knit material as a coating.

76. (New) The moisture transfer composite according to claim 70, wherein the microcapsules containing PCMs are applied so as to be integrally present in the breathable, open cell foam material or the knit material.

77. (New) The moisture transfer composite according to claim 71, wherein the microcapsules containing PCMs are applied so as to be integrally present in the breathable, open cell foam material or the knit material.

78. (New) The moisture transfer composite according to claim 72, wherein the microcapsules containing PCMs are applied so as to be integrally present in the breathable, open cell foam material or the knit material.

79. (New) The moisture transfer composite according to claim 69, wherein the elastomeric composite has microencapsulation technology applied thereto by application of microcapsules containing phase change materials (PCMs).

80. (New) The moisture transfer composite according to claim 79, wherein the microcapsules containing PCMs are applied to the elastomeric composite as a coating.

81. (New) The moisture transfer composite according to claim 79, wherein the microcapsules containing PCMs are applied so as to be integrally present in the elastomeric composite.

82. (New) The moisture transfer composite according to claim 69, wherein the elastomeric composite has microencapsulation technology applied thereto by application of a membrane.

83. (New) The moisture transfer composite according to claim 44, wherein the outer fabric layer is made to have waterproof/breathable characteristics by employing encapsulation technology.

84. (New) The moisture transfer composite according to claim 44, wherein the outer fabric layer is made to have waterproof/breathable characteristics by employing encapsulation technology.